

ELECTRICAL INVENTIONS.

TELEGRAPHING THROUGH THE AIR TO A FLYING RAILROAD TRAIN.

Henry Guy Carleton's Device for Detecting the Presence of Fire in Mines, Which He Gives Freely to the World. Author, Inventor, Philanthropist.

New York, Feb. 23.—Still more of the marvelous powers of the agency which we call electricity are demonstrated in the latest invention for telegraphing from a moving train. The device is the joint work of W. Wiley Smith, Thomas Edison and E. T. Gililand. Edison himself, pleased as a school boy, was aboard our train the other day when the device was tested. It is astonishingly simple, now that one knows how the invention works. The principle involved is that of "telegraphy by induction," that is to say, by electrical currents leading through the air. One well known quality of electricity is that it will jump through the atmosphere from one good conductor to another for a distance of over 400 feet. This property is the one taken advantage of in the new invention. The ordinary telegraph wires passing along all rail way lines convey the message the lengthwise distance. Thence it jumps, when it reaches the train, from the telegraph lines to the tin roofs of the cars. These are connected by a copper wire. In a little bunk in one of the cars sits the telegraph operator. Over his ears he has two telephone sound receivers, as you see in the illustration.



TELEGRAPHING ON THE TRAIN.

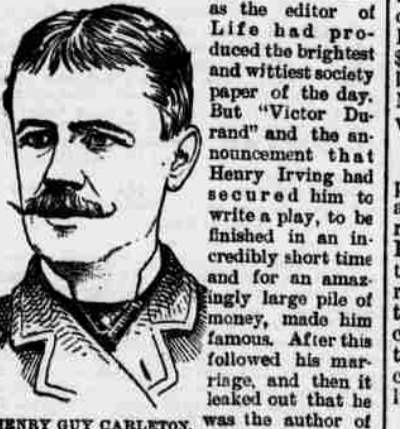
The electric current passes from the wires through the air in waves at the rate of 500 feet per second. These form a continuous musical note. They strike the metal roofs of the car, connected by a wire. These act as an electric condenser, so called. A wire passes from them to the telephone receivers above the operator's ears. By means of these his quick ear catches the sound. By striking exceedingly quick, sharp strokes the sender is able to break the musical sound into notes. By practice he makes these short, or long, as is desired. So the ear of the operator in the car catches the sounds, dot and dash, from an ordinary Morse key, and reads them. He has in the car with him an electro-magnet and a battery. When he telegraphs back the message jumps in the same manner from the roofs of the cars through the air to the wires, thence over them to the station. An electric condenser and the telephone receiver enable the operator to catch the sounds.

"But does not that interfere with the ordinary messages?" asked your correspondent. "Not at all," was the answer. "This new method is telegraphy by induction, not by direct transmission."

Our party that made the trial trip with the new invention over the Staten Island railway watched the experimenting in a state of pleased excitement. It was a perfect success.

By means of this railway collisions may be avoided entirely. Its value in this respect can hardly be overestimated. During this memorable trip we discussed the bearings of the new invention on the future of railroading. For one thing, it will probably break up sudden trips of bank presidents to Canada for their health. It is expected that the machine will be put into operation on roads between Canada and the United States first of all. Then a defrauded creditor can telegraph to a moving train upon any road and ascertain whether the defaulter he is looking for is on board.

An Invention for Detecting Fire in Mines. Another valuable application of electricity comes from an unexpected source. It will be remembered that the brilliant success of the play "Victor Durand" flashed before the public the name of Henry Guy Carleton as the author. He had for years been a newspaper writer and as the editor of Life had produced the brightest and wittiest society paper of the day. But "Victor Durand" and the announcement that Henry Irving had secured him to write a play, to be finished in an incredibly short time and for an amazingly large pile of money, made him famous. After this followed his marriage, and then it leaked out that he



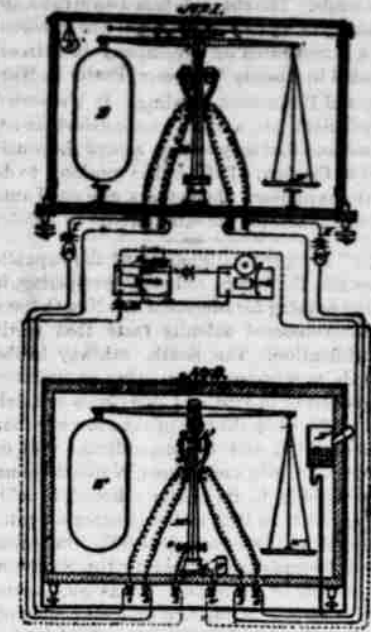
HENRY GUY CARLETON.

was the author of the humorous work on the editorial page of The New York Times. He has been the subject of much newspaper gossip since. Now he comes to the front as a philanthropist in the invention of an ingenious and sorely-needed contrivance for the purpose of indicating the presence or approach of fire in coal mines. The idea is bestowed gratis on the world by the inventor, he declining to take out patents on any of the parts or devices which enter into the construction of the machine. This invention will likely bring his name down to posterity linked with that of Sir Humphrey Davy, who devised the present safety lamp. The advantages of Mr. Carleton's device over that of the Davy safety lamp is that he can by his device detect a fraction of 1 per cent. of fire in a mine with the safety lamp is after the well known recipe for telling a candlestick out if, and if you live it is a mushroom. If you go into a mine with the Davy safety lamp and there is an explosion, it is caused by fire. With Mr. Carleton's invention danger is automatically recorded at the office of the company, so that it is not necessary to enter the mine for an examination.

It consists, says The Scientific American, of a pair of balances, each having at the beam a receptacle containing a given quantity of hydrogen gas the receptacles are daily counterbalanced. The moving parts of the two instruments are electrically connected and when properly adjusted any motion of one balance will instantly affect

"I've no appetite," complains many a sufferer. Hood's Sarsaparilla gives an appetite, and enables the stomach to perform its duty.

the balance of the other instrument, no matter how far apart the instruments may be located. Thus, one instrument may be



APPARATUS FOR DETECTING FIRE IN MINES.

placed within a coal mine and the other in the superintendent's office. Should an inflow of fire occur in the mine, the beam of the balance will instantly turn, carrying warning signals and alarms wherever wanted, together with information to the office showing the degree of change in the atmosphere of the mine. Ample time thus will be afforded, whether in night or day, to secure the safety of the miners; and the condition of the mine, whether safe or dangerous, will at all times be indicated by the instrument. Mr. Carleton has had no end of a romantic history. He is the son of Gen. Carleton, and was educated as a mining engineer. His inherited love for a military career drew him into the regular army. Becoming weary of a soldier's life, he turned to earning a splendid living by his pen. Some of his work during the Grant obsequies brought him \$100 a column. As a humorous writer he could not possibly supply the demand for his work only for the fact, as he says, that he comes high. In course of a chat with Carleton the other day he told me of one of the inventions of his fertile brain, and how it brought fortune to another. Carleton, by the way, is the most delicious stammerer in the world. When his tongue trips up and fails to work, he does not make any attempt at talking, but simply stops short until the balky vocal organ is ready to go ahead. There are many hitches and delays in his conversation, but it is more than made up for by the richness of his humor and the cleverness of his ideas. His invention on which another reaped the reward was this: While working on a New Orleans paper he found there was a certain style of broad humor and little dig at religion that no paper east would care to own. So he hit on the idea of crediting all these paragraphs to a little Oshkosh paper that he had run across in his army experience. No jokes of that time were copied or circulated so largely as those from what we will call The Oshkosh Gazette. Several years afterwards he happened to be in Oshkosh, and he thought he would see if this paper was still in existence. Instead of the tumble-down shanty, of which he carried a picture in his memory, he found a substantial brick building as the home of The Gazette. He went in and complimented the proprietor on his prosperity. In the course of conversation the latter admitted that it was largely due to the work of some blamed fool in the east, who kept crediting stories to his paper. For a time he could not understand why the "bald" subscriptions and demands for his paper came so suddenly from the east. But when he did "catch on" he said he simply republished as original all the jokes loose around the country credited to his paper. So this unknown paragraph brought him fame and fortune. "Thus," adds Mr. Carleton, "do the righteous ever triumph and virtue reaps its reward." S. H. HOBAN.

A Faultless Family Medicine.

"I have used in my family Simmons' Liver Regulator for the last eight or ten years, and found it to supercede anything recommended for chills, fever and ague. I have given up calomel, quinine and all other mercurial treatments. I give it to my children, from one year old to those of twenty-five years old. It is all you could wish in a family. Please use my name as you wish. Very truly, E. H. URBANKS, Crawford Co., Ga."

Ninety thousand two hundred and sixty dollars appears to be a big price for four horses. Yet Wesley P. Balach, of Boston has sold four for that sum viz: Faunaught to Col. H. S. Russell, for \$15,000; Purity to the late Thomas Wallace, of New York, \$25,000; Parana to Major Higginson, for \$18,200; Wedgewood, to the same party for \$23,000.

Judge of a government by the men it produces. Judge of a man by his deeds, a tree by its fruits, a medicine by its results. Time tried and true is Dr. Bigelow's Positive Cure, which contains the good qualities of all the best cough remedies without the defects of any of them. A safe and speedy remedy for coughs, colds and all throat and lung troubles. Sold by J. C. Saur in fifty cent and dollar bottles. Healing to the lungs. Safe and pleasant for children.

Mrs. Carlisle, the wife of the Speaker, recently asked a visitor of her sex: "How many children have you?" "Only one," was the reply. There was a quizzical smile on Mrs. Carlisle's face, and a quick exclamation and inquiry: "Only one! Is that all you have done for your country? Why, I have eight!"

I had a severe attack of catarrh, and became so deaf I could not hear common conversation. I suffered terribly from roaring in my head. I procured a bottle of Ely's Cream Balm, and in three weeks could hear as well as I ever could, and now I can say to all who are afflicted with the worst of diseases, catarrh, take one bottle of Ely's Cream Balm and be cured. It is worth \$1,000 to any man, woman or child suffering from catarrh.—A. E. Newman, Grayling, Mich.

No Telling What They Won't Do.

(McArthur Democrat.)

Mrs. R. (to her help): "Maggie, have the clothes been brought in from the line?"

Maggie: "No, ma'am; they are frozen fast to the clothes line, and I can't get them off."

Mrs. R.: "Very well, I presume nobody will steal them to-night."

Maggie (very seriously): "Indeed, ma'am, I'm not so sure of that. Since the Republicans are turned out of office there's no telling what they won't do."

Beware of fraud. Be sure you get the genuine Dr. Thomas' Electric Oil. It cures cold, croup, asthma, deafness and rheumatism.

The Cherokees, Choctaws and other tribes within the Indian Territory are pressing upon the attention of Congress the necessity for the establishment of a United States Court within the Territory.

"We don't have to recommend Parker's Hair Balm but once." Writes Mr. C. A. Burger, druggist, of Liberty N. Y. "After that it stands on its record." It stops falling hair, restores original color, softness and gloss. Exceptionally clean, prevents dandruff. 1mo

"Pa," remarked Johnny Caution, "cherry wood ain't elastic, is it?" "Of course not." "Well, I cut a piece of ma's new chiffroniere and made a ball out of it, and it don't bounce at all." "Eh?" growled the old man. "What bounce—oh, cherry bounce," and he reached for the son.

There is nothing better for a cut than powdered rosin. Pound it until fine, and put it in an empty, clean paper box with perforated top, then you can easily sift it on the cut, put a soft cloth around the injured member, and wet it with cold water once in a while. It will prevent inflammation and soreness.

Biliousness is very prevalent at this season, the symptoms being bitter taste, offensive breath, coated tongue, sick headache, drowsiness, dizziness, loss of appetite. If this condition is allowed to continue, serious consequences may follow. By promptly taking Hood's Sarsaparilla, a fever may be avoided or premature death prevented. It is a positive cure for biliousness. Sold by all druggists.

A country fellow entered one of the banks, says an exchange, and walking up to the counter exclaimed: "Here I am, I want you to take a good look at me." Without a word further he strode out. The next day the same customer appeared, uttered the same words and again disappeared. The third day, about the same time, he walked in, advancing to the teller's desk, three days after sight. "Now," said he, "you've seen me three times, I want the money for it."

The great sources of the extensive range of Dr. Jones' Red Clover Tonic are its great blood purifying qualities and its gentle aperitive action, thereby removing all restraint from the secretory organs, curing promptly and thoroughly dyspepsia, costiveness, bad breath, piles, pimples, low spirits, sick and nervous headache, ague, malaria and all stomach, liver and kidney troubles. The most delicate stomach accepts it with relish. Price fifty cents, of J. C. Saur.

THE GREAT UNFAILING SPECIFIC FOR THE LIVER COMPLAINT. SYMPTOMS OF TORPID LIVER

are a bitter or bad taste in the mouth; pain in the back, sides, or joints—often mistaken for rheumatism; sour stomach; loss of appetite; bowels alternately constipated and relaxed; loss of memory with a painful sensation of having failed to do something which ought to have been done; dizziness; low spirits; thick, yellow appearance of the skin and eyes; a dry cough often mistaken for consumption.

REGULATE THE LIVER AND PREVENT DYSPEPSIA, CONSTIPATION, JAUNDICE, BILIOUS ATTACKS, CHILLS AND FEVER, HEADACHE, COLIC, DEPRESSION OF SPIRITS, SOUR STOMACH, HEARTBURN, PILES, ETC.

TONIC, ALTERNATIVE AND CATHARTIC! SIMMONS' LIVER REGULATOR, purely vegetable, is the medicine generally used in the South to arouse the torpid Liver to a healthy action.

It acts with extraordinary power and efficacy on the Liver and Kidneys. The action of the Regulator is free from nausea or griping. It is most effective in starting the secretions of the Liver, causing the bile to act as a cathartic. When there is an excess of bile in the stomach, the Regulator is an active purgative; after the removal of the bile it will regulate the bowels and impart vigor and health to the whole system.

THERE IS BUT ONE **SIMMONS' LIVER REGULATOR**. See that you get the genuine with red "Z" on front of wrapper, prepared only by J. H. ZEILIN & CO., Sole Proprietors, Philadelphia, Pa.

PROVIDENCE

Helps those who help themselves. Nature has provided herbs for the cure of human ailments and medical science has discovered their healing powers, and the proper combinations necessary to conquer disease. The result of these discoveries and combinations is

MISHLER'S HERB BITTERS.

For many years it has been tested in severe cases of Kidney and Liver Diseases, Malaria, Dyspepsia, Indigestion, Weakness, Lassitude, etc., and invariably it has given relief and cure. Thousands of testimonials have been given, and it is most popular where best known.

J. O. Steinhilber, Superintendent of the Lancaster Co., Pa., hospital, writes: "I used it in a great many cases of dyspepsia, kidney disease, liver complaint, rheumatism, catarrh and scrofula, and invariably with best results."

F. Hoffman, of Circleville, Ohio, says: "This is to certify that I have had the dumb biliousness cured by using one bottle of Mischler's Herb Bitters. A complete cure has been effected."

MISHLER'S HERB BITTERS CO., 525 Commerce St., Philadelphia.

Parker's Pleasant Worm Syrup Never Fails

A GIFT Send 10 cents postage, and we will mail you free a royal, valuable, sample box of goods that will put you in the way of making more money at once than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required. We will stand you. Immense pay sure for those who start at once. BRINSON & CO., Portland, Maine. dec 3-1yr

When Baby was sick, we gave her CASTORIA. When she was a Child, she cried for CASTORIA. When she became Miss, she clung to CASTORIA. When she had Children, she gave them CASTORIA.

Horsford's

PHOSPHATIC BAKING POWDER, IS THE BEST, BECAUSE

It adds the nutritious and strength-giving phosphates required by the system.

It makes biscuit that dyspeptics can eat hot.

It requires less shortening than any other baking powder.

It makes biscuit that are sweet and palatable when cold.

It is the strongest baking powder made.

It is recommended by eminent Physicians.

No other baking powder has these qualities.

Put up in glass bottles with wide mouths to admit a spoon. Every bottle warranted. Cash Refund free.

Beafield Chemical Works, Providence, R. I.



THE BENTWOOD CHURN

LEAKAGE IMPOSSIBLE. Bottom and Sides one Continuous Piece of Lumber. Material, White Ash Wood. Inside Castings Well Galvanized.

MADE IN 3 TO 10 MINUTES.

Wanted in every town. Single churns or quantities where we have no agents at the place to introduce them. Send for circular and price list.

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GALEAF SALERATUS SODA Best in the World. Justly For Sale by A. Bradler.

PARKER'S HAIR BALM the popular favorite for dressing the hair, restoring the color when gray and preventing dandruff. It cleanses the scalp, stops the hair falling, and is sure to please. 50c and \$1.00 sizes at Druggists.

PARKER'S TONIC The Best Cough Cure you can use and the best known preventive of Consumption. PARKER'S Tonic kept in a home is a sentinel to keep sickness out. Used discreetly it keeps the blood pure and the Stomach, Liver and Kidneys in working order. Coughs and Colds vanish before it. It builds up the health. If you suffer from Debility, Skin Eruptions, Cough, Asthma, Dyspepsia, Kidney, Urinary or Female Complaints, or any disorder of the Lungs, Stomach, Bowels, Blood or Nerves, don't wait till you are sick in bed, but use PARKER'S Tonic to-day; it will give you new life and vigor. HISCOX & CO., N. Y. Sold by Druggists. Large saving buying \$1 size. dec 3-1yr

HAGAN'S Magnolia Balm is a secret aid to beauty. Many a lady owes her freshness to it, who would rather not tell, and you can't tell.

BOOTH'S MANUAL Sold easily and rapidly. The latest, best and cheapest book on the subject of "DOMESTIC MEDICINE" Active Men & Women wanted in every town to sell this popular book. If you want to make money write at once for terms & territory. F. M. DILLON & CO., Cincinnati, O. nov 24-3mo

BEDRIDDEN Mrs. ANNA RAND, of Blair, Ga., under date of Nov. 6, 1884, says: "I have been using your wonderful remedy, Bradfield's Female Regulator, in my family a long time, and I would to God that every afflicted woman in our land knew of its wonderful virtues and curative powers as I do; for there would be a great deal less suffering among our sex. I am sure I would have been bedridden for life had it not been

FOR LIFE!

DURING THIS MONTH

We shall make special endeavors to close out our

Winter Goods, DRESS GOODS, TRECOTE,

and people in search of bargains in Winter Flannel, Satings, Hosiery, Underwear, Blankets, Readymade Comforts, Gloves, Mittens, Boots and Shoes, Notions, Etc., Etc.

Will find it to their interest to give us a call. Respectfully,

NORDEN & BRUNS.

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Merchant Tailoring Department.

Having just received, we will offer material of all the Standard, Foreign and Domestic goods, in plain cloth, tricot, flannel, muslin, and pantalon goods, and warrant First-class Fit, best workmanship and finest trimmings at a price which considering the Standard of our work will prove satisfactory.

IN READY-MADE CLOTHING

We offer you a magnificent assortment of Fine Dress Goods for men, youths, boys and children. On our medium and working garments we can save you 25 per cent.

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Eighmie Patent Shirt, The finest and cheapest dress shirt made in the world.

Also, standard makes of Collars and Cuffs. The latest novelties in Neckwear, Hosiery, Gloves and Underwear, and fully 15 per cent. less than you buy elsewhere. Hats and Caps, all the latest styles in soft and stiff hats, at low prices.

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A GREAT 1-4 OFF SALE

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We will offer an extraordinary inducement to buy Dress Goods by giving back

25 Cents on Every Dollars Worth of Dress Goods Bought of Us,

And this deduction will be made from the basis of our present low prices.

Brocade Dress Goods, black and colored Cashmeres, Satin Berber, Ottoman, Flannels, Plaids, Suiting, and Novelty Goods, all included. A large and elegant line of new Silks go also.

Terms Cash.

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Mrs. ANNA RAND, of Blair, Ga., under date of Nov. 6, 1884, says: "I have been using your wonderful remedy, Bradfield's Female Regulator, in my family a long time, and I would to God that every afflicted woman in our land knew of its wonderful virtues and curative powers as I do; for there would be a great deal less suffering among our sex. I am sure I would have been bedridden for life had it not been

FOR LIFE!

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